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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/502,351  
Applicant : Lian Hui ZHANG et al  
Filed : July 23, 2004  
TC/A.U. : Unknown  
Examiner : Unknown  
  
Docket No. : 2977-154  
Customer No. : 06449  
Confirmation No. : 6085

INFORMATION DISCLOSURE STATEMENT

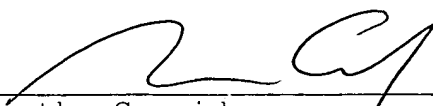
Director of the United States Patent  
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Dear Sir:

Under the provisions of 37 C.F.R. §§ 1.56, 1.97 and 1.98,  
Applicant submits herewith information that the Office may wish  
to consider in examination of the subject application. Materials  
submitted for consideration are listed on the attached form PTO-  
1449.

Respectfully submitted,

By

  
\_\_\_\_\_  
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Enclosure(s): Form PTO 1449 (w/References)

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				Group Art Unit	Unknown
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Sheet	1	of	4	Attorney Docket Number	2977-154

## **U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document  MM-DD-YYYY
		Number	Kind Code <sup>2</sup> (if known)		

## **FOREIGN PATENT DOCUMENTS**

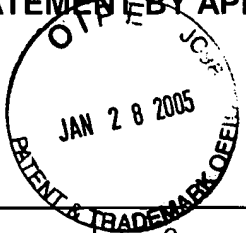
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T <sup>6</sup>
		Office <sup>3</sup> Code	Number <sup>4</sup>	Kind <sup>5</sup> (if known)			
	AA	PCT	WO 01/98214 A1		NOVOZYMES BIOTECH INC.	12/27/2001	

## **NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
	AB	ALLISON et al., "Extracellular products as mediators of the formation and detachment of <i>Pseudomonas fluorescens</i> biofilms," FEMS Microbiol. Lett. 167:179-184, 1998.	
	AC	BASSLER, et al., "Cross-species induction of luminescence in the quorum-sensing bacterium <i>Vibrio harveyi</i> ," J. Bacteriol. 179:4043-4045, 1997.	
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	AE	CAO et al., "Purification and structural identification of an autoinducer for the luminescence system of <i>Vibrio harveyi</i> ," J. Biol. Chem. 264:21670-21676, 1989.	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code. <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language translation is attached. AB indicates that only an English language abstract is attached.

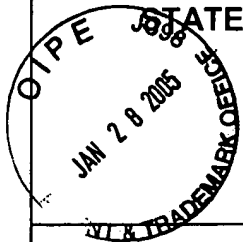
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	AF	CHA et al., "Production of acyl-homoserine lactone quorum-sensing signals by gram-negative plant-associated bacteria," <i>Mol. Plant Microbe Interact.</i> 11:1119-1129, 1998.	
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	AH	DAUMY et al., "Role of protein subunits in <i>Proteus rettgeri</i> penicillin G acylase," <i>J. Bacteriol.</i> 163:1279-1281, 1985.	
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	AN	EBERHARD et al., "Structural identification of autoinducer of <i>Photobacterium fischeri</i> luciferase," <i>Biochemistry</i> 20:2444-2449, 1981.	
	AO	EBERL et al., "Involvement of N-acyl-L-homoserine lactone autoinducers in controlling the multicellular behaviour of <i>Serratia liquefaciens</i> ," <i>Mol. Microbiol.</i> 20:127-136, 1996.	
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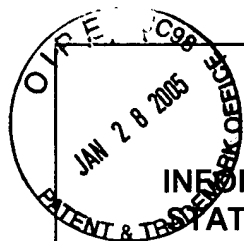
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	AP	FUQUA et al., "Conserved cis-acting promoter elements are required for density-dependent transcription of <i>Agrobacterium tumefaciens</i> conjugal transfer genes," <i>J. Bacteriol.</i> 178:435-440, 1996.		
	AQ	INOKOSHI et al., "Cloning and sequencing of the aculeacin A acylasae-encoding gene from <i>Actinoplanes utahensis</i> and expression in <i>Streptomyces lividans</i> ," <i>Gene</i> 119:29-35, 1992.		
	AR	JONES et al., "The Lux autoinducer regulates the production of exoenzyme virulence determinants in <i>Erwinia carotovora</i> and <i>Pseudomonas aeruginosa</i> ," <i>EMBO J.</i> 12:2477-2482, 1993.		
	AS	LEADBETTER et al., "Metabolism of acyl-homoserine lactone quorum sensing signals by <i>Variovorax paradoxus</i> ," <i>J. Bacteriol.</i> 182:6921-6926, 2000.		
	AT	LEADBETTER, J.R., "Quieting the raucous crowd," <i>Nature</i> 411:748-749, 2001.		
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	AW	MATSUDA et al., "Nucleotide sequence of the genes for two distinct cephalosporin acylases from a <i>Pseudomonas</i> strain," <i>J. Bacteriol.</i> 169:5821-5826, 1987.		
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	AY	PASSADOR et al., "Expression of <i>Pseudomonas aeruginosa</i> virulence genes requires cell-to-cell communication," <i>Science</i> 260:1127-1130, 1993.		
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	AZ	PEARSON et al., "Structure of the autoinducer required for expression of <i>Pseudomonas aeruginosa</i> virulence genes," Proc. Natl. Acad. Sci. USA 91:197-201, 1994.	
	BA	PIPER et al., "Conjugation factor of <i>Agrobacterium tumefaciens</i> regulates Ti plasmid transfer by autoinduction," <i>Nature</i> 362:448-450, 1993.	
	BB	PIRHONEN et al., "A small diffusible signal molecule is responsible for the global control of virulence and exoenzyme production in the plant pathogen <i>Erwinia carotovora</i> ," <i>EMBO J.</i> 12:2467-2476, 1993.	
	BC	SCHUMACHER et al., "Penicillin acylase from <i>E. Coli</i> : unique gene-protein relation," <i>Nucleic Acids Res.</i> 14:5713-5727, 1986.	
	BD	STASKAWICZ et al., "Molecular characterization of cloned avirulence genes from race 0 and race 1 of <i>Pseudomonas syringae</i> pv. <i>Glycinea</i> ," <i>J. Bacteriol.</i> 169:5789-5794, 1987.	
	BE	TAKESHIMA et al., "A deacylation enzyme for aculeacin A, a neutral lipopeptide antibiotic, from <i>Actinoplanes utahensis</i> : purification and characterization," <i>J. Biochem.</i> 105:606-610, 1989.	
	BF	VERHAERT et al., "Molecular cloning and analysis of the gene encoding the thermostable penicillin G acylase from <i>Alcaligenes faecalis</i> ," <i>Appl. Env. Microbiol.</i> 63:3412-3418, 1997.	
	BG	WHITE et al., "Genome Sequence of the Radioresistant Bacterium <i>Deinococcus Radiodurans</i> R1," <i>Science</i> 286:1571-1577, 1999.	
	BH	ZHANG et al., "Agrobacterium conjugation and gene regulation by N-acyl-L-homoserine lactones," <i>Nature</i> 362:446-448, 1993.	
	BI	Swiss-Prot. Accession Q9RYQ4, WHITE et al., (two pages) (1999).	
	BJ	Embl Accession AE001836, WHITE et al., (ninety pages) (1999).	
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